

What is claimed is:

1. A manufacturing method of a semiconductor integrated circuit device, comprising:

(a) storing apparatus log data that are data outputted from a semiconductor manufacturing apparatus that processes a semiconductor wafer and show a state of the semiconductor manufacturing apparatus in a apparatus log data memory;

(b) detecting whether there are abnormal data in the apparatus log data stored in the apparatus log data memory or not at an abnormal data detector; and

(c) outputting a result detected at the abnormal data detector to a result output portion.

2. The manufacturing method of a semiconductor integrated circuit device according to claim 1, further comprising:

receiving an end signal outputted from the semiconductor manufacturing apparatus at an end signal receiver after a predetermined number of the semiconductor wafers are processed,

wherein the process (b), upon receiving the end signal at the end signal receiver, detects whether the abnormal data are present in the apparatus log data stored in the apparatus log data memory or not.

3. The manufacturing method of a semiconductor integrated circuit device according to claim 1, wherein the

process (b) detects whether the apparatus log data have a sudden abnormality protruded from a permissible range or not.

4. The manufacturing method of a semiconductor integrated circuit device according to claim 3, wherein the permissible range is determined according to preset upper and lower limit values or a definite width preset to an average value of the apparatus log data.

5. The manufacturing method of a semiconductor integrated circuit device according to claim 1, wherein the apparatus log data contain a plurality of headers; and the process (b) includes

(b1) acquiring a search key that assigned the header of the apparatus log data;

(b2) extracting past data coinciding with the apparatus log data in a content of the header assigned with the acquired search key from a past data memory;

(b3) calculating a standard deviation from the extracted past data; and

(b4) detecting based on the calculated standard deviation whether the abnormal data are present in the apparatus log data or not.

6. The manufacturing method of a semiconductor integrated circuit device according to claim 1, wherein the result output portion includes an operator terminal unit connected to the semiconductor manufacturing apparatus or a

computer that an engineer uses.

7. A manufacturing method of a semiconductor integrated circuit device, comprising:

(a) inputting apparatus alarm data that are data outputted from semiconductor manufacturing apparatus that processes a semiconductor wafer and show an abnormality of the semiconductor manufacturing apparatus in an abnormal data detector;

(b) detecting, based on the inputted apparatus alarm data, at the abnormal data detector, whether the semiconductor wafer is treated as abnormal or not; and

(c) outputting a result detected at the abnormal data detector to a result output portion.

8. The manufacturing method of a semiconductor integrated circuit device according to claim 7, wherein the process (b) detects as abnormal when the inputted apparatus alarm data coincide with fatal alarm data registered in advance.

9. The manufacturing method of a semiconductor integrated circuit device according to claim 7; wherein the process (b) detects as abnormal when the inputted apparatus alarm data correspond to increased supervision data registered in advance and are repeatedly inputted in the abnormal data detector a predetermined number of times or more during a predetermined time period.

10. A manufacturing method of a semiconductor integrated circuit device, comprising:

- (a) outputting a lamp power of each of lamps from a semiconductor manufacturing apparatus that forms a film on a semiconductor wafer and has lamps for heating the semiconductor wafer and a lamp house that houses a plurality of the lamps to store in an apparatus log data memory;
- (b) detecting whether there is, in the lamp powers stored in the apparatus log data memory, one that is larger than a predetermined value or not; and
- (c) outputting a result detected at the abnormal data detector to a result output portion.